

Abstracts

‘Designing for and Evaluating Wicked Problem Environments: Towards a Mindfulness-based IS Utilization Evaluation Framework’

Alexis Amaye

Department of Accounting, Finance and Information Systems

Email: 114224269@umail.ucc.ie

Demonstrating system effectiveness to support critical processes is generally expected within business organizations, however, when those processes directly impact the life/safety of citizens there is a higher benefit to public sector organizations. While financial resourcing is shown as one of the hindrances to the digital transformation and ICT diffusion within such organizations (Mansell, 2007), our study highlights other barriers affecting the transition. In highly dynamic environments, reliance on specific types of ICT is coupled by an adherence to processes which allow for greater adaptability and flexibility in the use of those systems. Our paper explores system utilization in multi-agency coordinated decision making during emergency incidents. Using design science to create an artefact to evaluate the effectiveness of decision making supported by information systems, our case study highlights attributes of that support which impact team performance. With organizational mindfulness our theoretical framework, the paper presents a mixed method approach to the development of the artefact. It presents findings obtained during the design process through observation and engagement with practitioners. While the application is restricted to public sector and humanitarian domains, the constructs and variables being investigated are wide reaching and applicable to domains where systems are used to support real-time decision making.

‘Exploring the Business Value of Private Cloud Infrastructure-as-a-Service (IaaS) Using RBV Theory: A Study of Tertiary Institutions in UK and Ireland’

Charles Osemwingie Amayo, BSc, BBS (Hons), MSc

Email: charlesamayo@yahoo.co.uk

Department of Accounting, Finance and Information Systems

Cloud computing, a vision of computing as a utility, has become a mainstream approach in the provisioning and use of IT and computing resources in organisations. Cloud computing is attractive to all types of organisations as it exploits economies of scale in providing dynamically scalable and virtualised IT and computing resources accessible over the internet. Typically, cloud computing consists of three service models (IaaS, PaaS and SaaS) and four deployment models (public cloud, private cloud, community cloud and hybrid cloud). Of all the deployment models, public cloud is regarded not only as the most popular (Yang et al., 2011; Martini & Choo, 2012; Palanivel1 & Kuppaswami, 2014) but also the most financially attractive (Armbrust et al., 2010) especially to the SMEs (Misra & Mondal, 2011; Neves et al., 2011; Suciú et al., 2012; Gupta et al., 2013; Carcary et al., 2014). However, large organisations including higher educational institutions, especially those with intellectual properties, sensitive data, mission critical core business data, applications and systems, are sceptical using public cloud for business purposes due to perceived security and data protection risks. Adoption of private cloud IaaS across universities and other higher educational institutions is increasing (Lunsford, 2009; Doelitzscher et al., 2011; Chandra &

Borah, 2012; Burd et al., 2013; Chrobak, 2014; IDC, 2016; RightScale, 2016). Despite this trend and a growing body of literature on cloud computing, there is a dearth of empirical research on the business value derived from private cloud IaaS by these universities. The focus of this research is to investigate the business value of private cloud IaaS in third level education.

Ultimately this study contributes to knowledge by (1) improving our understanding of the business value of private cloud IaaS in third level education; (2) identifying the requisite skills and knowledge of IT personnel as well as organisational factors that shape the business value derived from private cloud IaaS and (3) improving our understanding of the role of IT personnel and the organisational factors in shaping the business value derived from private cloud IaaS.

‘The Development of Social Sustainability Indicators for Irish farms’

Mary Brennan

Email: 117222128@umail.ucc.ie

Department of Food Business & Development

While the environmental and economic sustainability indicators measured through the Teagasc National Farm Survey are well defined and progressive, the indicators of social sustainability require further research and refinement. The current suite of social sustainability indicators assessed by the National Farm Survey (NFS) relate primarily to the farm household level, what is considered the ‘internal’ perspective of social sustainability.

The development of additional social indicators with a focus upon ‘external’, or farm community level is crucial to gain a holistic view of Irish agricultural sustainability.

Following the completion of a literature review, a potential list of additional social sustainability indicators will be derived. A series of interviews will be conducted with stakeholders from a variety of sectors, in order to discuss the list of potential indicators.

These stakeholders will represent the various sectors invested in rural affairs, such as members from the Irish food industry, farmer representative groups, government departments, environmental agencies and others. The objective of these stakeholder interviews is to provide validation and feedback on the selection of sustainability indicators put forward, and to contribute specialist knowledge towards public policy requirements, rural environment, the food industry, and community development.

It is envisaged that through a literature review on indicator development, in conjunction with stakeholder interviews and advice, a comprehensive list of indicators to assist in the analysis of external social sustainability can be established for Irish farms.

The expansion of social sustainability indicators is imperative for the evaluation and observation of policies regarding rural sustainability and development, in addition to providing refined and vital socio-economic feedback on current farm level and community level conditions.

‘All Cops Are Bastards’: Extreme Football Fans Reactance to the Neoliberalization of Fandom’

Dave Alton

Email: david.alton@ucc.ie

Department of Management & Marketing

Football fandom is a rapidly changing marketplace culture. The netnographic study focuses on how neoliberal forces have diminished the liberties of extreme football fans, resulting in marketplace exclusion. Emerging from the growth of consumer fandom, global football brands have become some of the most profitable in the world (Hewer et al., 2015), and the football industry can be categorized as big business (Price et al. 2013, McDonagh 2016). Thus, market-orientated practices such as branding, have become synonymous with the spectacle of sporting events (Crawford 2004). Extreme behaviour, as an expression of commitment to one’s football club is an existential necessity for extreme football fans (Daniel and Kassimeris 2013). Neoliberalization has changed the relationship between supporters and their football clubs (Malcolm et al. 2000), a transformation in the type of atmosphere experienced at a football ground (Williams 2006), and a shift in the dynamic of the football spectator base itself towards a more market-centric, and in some case placeless form of fandom (Nash 2000, King 1995, Giulianotti and Robertson 2007, Malcolm et al. 2000). The transformation has ultimately resulted in the displacement of working class football supporters from what was once the symbolic underpinning of working class culture (Davis 2015). Thus, for some, fandom has been desacralized (Brown 2007). Extreme fans no longer see their football clubs as symbolic representations of the local community and local culture, but as an embodiment of a globalized, cosmopolitan, market-driven world, detached from the people it originally represented (Buckley 2004). The study shows that the imposition by the market on the socio-cultural dynamics of fandom (a political culture of reducing risks and increasing profit), imposes on sacred, liminal forms of fandom, resulting in an exacerbation of deviant fan behaviour. The study also shows that the web facilitates market reactance, culminating in the emergence of a globalized resistance movement.

‘The Invisible Employee’:

The Emerging Gig Economy and its Implications for the Employment Relationship

James Duggan

Email: jamesduggan@umail.ucc.ie

Department of Management and Marketing

The emergence of the ‘gig economy’, driven by organisations such as Uber and Deliveroo, has been rapid. Approximately 54 million individuals in the US and 1 million people in the UK are now employed in untraditional work and the gig economy (Makoff, 2017; Manyika *et al.*, 2016; Cappelli and Keller, 2013). Often characterised as an umbrella term of various types of contingent work, this paper demonstrates the need avoid such simplistic aggregation in favour of a conceptualised classification of gig workers that accurately reflects the increasingly idiosyncratic nature of the employment relationship (Liao *et al.*, 2016; Harvey *et al.*, 2017; Lemmon *et al.*, 2016; Bernhardt and Thomason, 2017). This paper argues that gig work boasts several distinguishing characteristics, including the use of technology to facilitate on-demand work, strict temporal limitations, and variances in our understanding of working relationships (Rosenblat and Stark, 2016). A clearly delineated focus on these

textured dimensions has the potential to uncover new lines of enquiry into employment relationships in this domain.

By providing greater conceptual clarity to the nature of gig work, we can gain a better understanding of the employment relationship and the ensuing implications for individuals, organisations and society. Companies operating in the gig economy avoid the label ‘employee’, and such flexibility in working arrangements eliminates the need for, among other things, potential overtime payments, union organisation, provision of training and development, and unemployment benefits (Rubery *et al.*, 2016; Auer *et al.*, 2014). The employment relationship can be effectively understood through the lens of the psychological contract in that it helps capture the more personal, individualised arrangement existing between worker and employer (Rousseau, 2001; Guest, 2004). However, utilising psychological contract theory to gain insight into employment relationships within the gig economy is problematic due to the lack of dialogue between both parties (Tran and Sokas, 2017). Given that organisations deny any employment relationship with gig workers, it is uncertain how this impacts working arrangements, or if those performing gigs perceive a psychological contract to even exist. Accordingly, employment relationships in the gig economy dismantle much of the architecture of the psychological contract, therefore creating a need to reconceptualise the working arrangement between worker and employer. The sudden emergence and growth of the gig economy potentially renders a great deal of the extant literature on the employment relationship inappropriate to understanding this new form of labor. This paper redresses this issue through demonstrating how the ‘invisibility’ of gig workers differs substantially to other forms of contingent labour and explores the associated implications for HRM policy and practice.

‘Impact of Emerging Technologies on the Financial Sector’

Stephen Dooley

Email: 113457338@umail.ucc.ie

Department of Accounting, Finance and Information Systems

This presentation attempts to provide a brief account of how some cutting-edge technologies are beginning to influence the finance industry as we know it. Recent rapid developments in technology are beginning to have industry wide-effects, changing how banking is being carried out.

Each of the technologies being discussed are at different stages of development, comprehension and adoption. The list includes: Cognitive computing, quantum computing, artificial intelligence, robotic process automation and blockchain. Though these topics are highly technical the presentation will focus on the real world application rather than the operational jargon.

Analysis for this presentation included heavy literature review of the most recently available papers and journals and also some fundamental analysis on industry leaders who have been adopting and implementing the technologies. The literature review process allowed us to understand the current state of affairs of the mentioned topics and to wholly understand the direction they are going in. As the area is so cutting edge we are actually a number of months behind as it typically takes approximately 6 months for publication in the IS area. The beauty of this is that this same presentation given in a year’s time may be drastically different to today’s one.

‘A Social Media Influence Framework on the Networking Capabilities of Entrepreneurial Firms’

Conor Drummond

Email: c.m.drummond@umail.ucc.ie

Department of Management and Marketing

Given the dearth of literature and research in the field of Business-to-business (B2B) social media, this paper examines the influence that social media has upon the networking capability of entrepreneurial firms. Taking a business network's approach and IMP (Industrial marketing and purchasing group) perspective for the research investigation, this study aims to uncover the way social media platforms (Facebook and Twitter in this case) have affected the entrepreneurial firm's ability to connect, engage, interact, and collaborate with its B2B network.

The Irish artisan producer is used as an empirical base, employing the case study methodology with a single case firm participant. The findings suggest that social media has allowed the entrepreneurial firm to overcome specific contextual liabilities through its network, with social media's immediacy enhancing relationship and network development.

This study indicates that social media strengthens the firm's ability to widen its network horizon and network context, coordinate information and knowledge flows, and engage in collaborative activities with B2B network actors. Furthermore, the investigation results posit that social media has become a resource/activity creator, while the application of the four-layered influence framework to future analysis is also discussed.

‘mHealth in Rural Areas of Developing Countries: A Sociomaterial Perspective’

Emmanuel Eze1 with Rob Gleasure and Ciara Heavin

Email: emmaeze.sunny@gmail.com

Department of Accounting, Finance and Information Systems

The integration of smartphones and mobile devices into healthcare systems has been proposed to address some of the physical barriers to care and service delivery in rural areas of developing countries. These mHealth solutions extend the reach of medical care into hard-to-reach areas of developing countries. However, it is not clear how mHealth solutions designed and tested in one developing region can be adapted for use in others. This study frames this problem using a sociomaterial analysis of rural health services for under-fives in Enugu State,

Nigeria. Preliminary findings identify: at the ‘social-level’, the perceived limitation of services, human resources and a sense of exclusion from urban health system; at ‘material-level, we observed significant infrastructural and technological limitations that discourage local healthcare workers (LHCWs) and parents/guardians (PGs) from spending prolonged periods at the rural health centres; at the ‘practice-level’, the formal diagnosis treatment methods practiced by the LHCWs in the midst of the PGs diagnosis and treatment practices and African traditional healing practices, and at ‘imbrication-level’, the entanglement of phones with internet access have exposed PGs to a range of health information outside the control or guidance of health professionals. These findings have implications for theory, practice, and future research on how to maintain procedural rigidity in healthcare delivery with the unlimited and un-regulated internet use of health information.

Keywords: Health Care; Developing Countries; Mobile Technology; Socio-materiality; mHealth.

‘A VAR analysis of the effects of ageing demographics and income on health expenditure’

Ruth Gibbs

Email: 96343630@umail.ucc.ie

Department of Accounting, Finance and Information Systems

As the Irish economy and government finances recover from the years of austerity, there is a greater need to understand the drivers of health expenditure from a macroeconomic level. This need is even greater, given the projected age profile of the Irish population, as only 55% of the population are forecasted to be of working age by 2050 (Eurostat 2017). The relationship between health expenditure and ageing is not consistent in the literature despite increasing work in this area (Lopreite and Mauro 2017). In addition, the relationship between income and health expenditure has also been shown to be two-way (Bech, Christiansen et al. 2011). This paper will use a Vector Autoregression (VAR) model with CSO, Eurostat and Department of Health data to investigate the relationship between age dependency, life expectancy, income and health expenditure in Ireland. The results show that health expenditure responds more to ageing over a ten-year period than it does to life expectancy and GDP. More importantly, in the first five years after a shock, health expenditure responds more to changes in GDP, compared to the age index and life expectancy. The consequences of the study's finding are significant for policy makers, as they highlight the need for long-term planning of health expenditure, particularly if GDP were to fall at a time when effects of ageing demographics were impacting.

‘Stranded Generation Assets & the Implications for the European Gas Network’

Conor Hickey with Paul Deane, Celine McInerney, & Brian Ó Gallachóirb

Email: conor.hickey@ucc.ie

Department of Accounting, Finance and Information Systems

This paper aims to assess the future investment case and stranded asset risk for gas fired generation assets and the financial implications for each member states gas network in the 2030 to 2050 period throughout the European Union. The analysis begins with a review of the lock-in potential of gas in power systems, followed by an introduction to the approach of linking an integrated power and gas model with a valuation model and high level gas network tariff model concluding with a discussion on the results of the study. The results of this study point to gas generation assets potentially becoming stranded across the EU. Reduced running hours for gas fired generation assets resulting in significant reductions in gas demand from the power generation sector. This results in increases in the tariffs charged to network users in other sectors in order for the network to recover sufficient levels of revenue to remain viable.

Keywords: Gas, Decarbonisation, Investment, Risk, Power Systems Modelling.

‘Digital Exemplars: Leading the Digital Transformation Roadmap’

Resego Morakanyane

Email: resego.morakanyane@gmail.com

Department of Accounting, Finance and Information Systems

Emerging digital technologies continues to invade organizations, dictating how they should run their businesses. While there is an exponential growth in the uptake of digital technologies to create value, literature reveals that only a few organizations are succeeding in realizing this impact. Using case studies, we explore digital exemplar characteristics that enable them to outperform their peers in leveraging the digital opportunity. We extract a possible process that exemplars might have followed in this effort. We recommend construction of a digital transformation framework that could be adopted by digital laggards hoping to embark on a digital journey.

Keywords: Digital exemplars, digital maturity, digital transformation strategy, digital transformation framework

‘Exploring the Application of Blockchain Technology to Combat the Effects of Social Loafing in Cross Functional Group Projects’

Kevin O’Leary

Email: olearyk@umail.ucc.ie

Department of Accounting, Finance and Information Systems

Today, many multi-national organisations operate in a dispersed geographical environment. Teams consisting of members from around the globe can be assembled on an as-needed basis. However, this can prove to be a complex managerial task. Individuals, who believe that their efforts are not being effectively monitored by upper management, lose their motivation to fully contribute to the best of their abilities as they do not believe there is any correlation between the effort they exert and the reward they receive. With low levels of intrinsic involvement among employees, a lack of task visibility from upper management and limited social interaction among group members, many organisations struggle to combat the issue of social loafing in cross functional working groups. Blockchain technology can facilitate the development of an immutable, transparent, secure and verifiable application for capturing individuals Intellectual Property as they work. This would motivate employees to more openly contribute to group work, safe in the knowledge that their contribution will be recognised, enabling management to maintain a high level of task visibility over their employees work without requiring their physical presence.

‘The Upcycling Movement: Pursuing Hedonistic Sustainability’

Grace O’Rourke

Email: g.orourke@umail.ucc.ie

Department of Management & Marketing

The planet cannot sustain current levels of resource depletion and waste production. Unsustainable consumption practices have been identified as a key detriment to the physical environment. An issue identified by sustainable consumption researchers, has been the positioning of sustainability in opposition to capitalist systems. If sustainable consumption is

instead considered amongst the social and cultural functions by which consumers currently consume, there may be a more potent mechanism to encourage widespread sustainable consumption behaviours. Hedonic pleasure specifically, is often sought through consumption objects, and it is accepted that consumers do not just have a right, but also a duty to seek pleasure. This interpretive study used ethnographic methods to investigate the upcycling movement – a movement which sees individuals actively use disregarded materials to create objects of higher quality or value. Upcycling is found to exist as a form of *'hedonistic sustainability'*. Identified hedonic elements of upcycling practices include for example, emotional states brought about by the upcycling process including excitement, relaxation and pride. From a sustainable consumption perspective, this study shows that hedonic pleasure gained through consumption, can not only be gained from new consumption objects (as is most often studied in consumption literature), but also from material objects that have been previously discarded. Thus, if public policy exists to promote upcycling practices, both introductory and long-term changes in favour of sustainable consumption practices, could become more widespread.

'Scepticism: Defining an Agenda for Empirical Investigation'

Claire O'Sullivan Rochford

E-mail: c.osullivanrochford@ucc.ie

Department of Accounting, Finance & Information Systems

This paper conceptualises a theoretical relationship between the concepts of reflection and professional scepticism in the context of auditing. Professional scepticism is the cornerstone of audit quality and an essential part of forming audit judgments [Glover and Prawitt (2014); Quadackers et al; (2014) Westermann et al., (2014)] Reflection is posited as a defining characteristic in the development of competent professionals (Mann et al., 2009).

Despite the sheer volume of literature in relation to reflection, a common and agreed definition does not exist. [Moon (1999)] Dewey (1933) is normally considered to be the originator of the concept and he recognised it as a deliberate or conscious consideration of a situation, or an engagement in intelligent thought. Also, despite its esoteric nature, it very much seems to be rooted in practical actions.

Reflection refers to both a personal [Dewey (1933), Boyd and Fales (1983) Boud et al.,(1985) and Mezirow (1991)] and/or collaborative process[Frost (2010), Boud (2010), and Koole et al.,(2011)] focused on responding to situations of uncertainty so as to resolve them. In essence, it consists of three key elements: an uncertainty exists, a consideration and re-evaluation of the uncertainty must take place and a resolution to the uncertainty must be reached.

Despite much research, there is no universally agreed definition of professional scepticism [Quadackers et al., (2014; Hurtt et al., (2010); and Nelson (2009).] Two dominant perspectives have emerged in both the academic literature and in the audit standards. The Neutral Perspective [Hurtt et al.,(2010)], assumes that those who have prepared the accounts are neither honest or dishonest and that there is no bias in management representations. The Presumptive doubt perspective [Bell et al., (2005); Nelson (2009)] assumes some level of dishonesty or bias on the part of the preparers of financial statements. There is a lack of consensus within the literature as to which is the most appropriate viewpoint (Quadackers et al., 2014). Other viewpoints have also been proposed: traditionally it was associated with suspicion [Shaub (1996)] and as attitudinal [Nolder and Kadous (2014)].

Based on the theoretical definitions and dimensions of both reflection and professional scepticism, this paper argues that while reflection itself is an abstract concept, the auditor's [mandatory] requirement to exercise professional scepticism in the conducting of an audit and in the forming of an audit opinion provides a concrete form of a reflective process. The paper concludes by putting forward a research agenda to empirically investigate this relationship.

‘Using Eye-Tracking Methods and Retrospective Think Aloud to Explore the Cognitive Processes Associated with Label Usage’

Sean Tanner

Email: s.a.tanner@umail.ucc.ie

Department of Food Business and Development

Although the internet has revolutionised consumption culture, traditional food retailers continue to be the primary source of first exposure to new product offerings for many consumers in food markets. Therefore, for new product offerings food product labels remain an important communication medium for manufacturers and customers. Despite the breadth of research which addresses issues concerning ease of understanding and use of labelling information and formatting, there has been limited research conducted which situates the interaction with individual labels within the broader decision making context. This study investigates the factors driving consumers' motivation to engage with food product labels to develop a framework of label usage motivation. In the case of food, yogurt is an interesting category to consider, as it is associated with health, enjoyment and convenience and was consequently selected for the study of label usage determinants. This study builds on previous work, using eye-tracking experiments, a retrospective think-aloud protocol and semi-structured interviews. This facilitated the exploration of the cognitive processes underlying engagement with labels of new product offerings and situated these within the participant's broader purchasing contexts. These cognitive processes encompass the generation or utilisation of knowledge or strategies for practical or intellectual purposes. This study identifies key information usage and decision strategies and the factors which gives rise to these. Findings suggest that consumer involvement is being shaped by the perceived importance of negative consequences (i.e. risk importance). This is further reflected in the label usage strategies identified, which appear to align to the negotiability and specificity of health-related goals. Integration of eye-tracking, retrospective think-aloud and interview data reveal that although bottom-up factors were observed to promote non-volitional attention through design features, in the absence of personal relevance this information was discounted from the evaluation process, highlighting the importance of needs based information provision. Implications for label communication are discussed and future research directions and key areas of consideration for both marketing and product development professionals are identified.